Idaho Pollutant Discharge Elimination System

Industrial (Non-POTW) Individual Permit Application Instructions

New Dischargers of Process Wastewater (Adapted from EPA Form 2D)



State of Idaho
Department of Environmental Quality
Water Quality Division
1410 N. Hilton
Boise, ID 83706

July 2018



Printed on recycled paper, DEQ July 2018, PID IPGF, CA code 82988. Costs associated with this publication are available from the State of Idaho Department of Environmental Quality in accordance with Section 60-202, Idaho Code.

Table of Contents

Abbreviations and Acronyms	iv
General Information	1
Who Must Apply	1
Tribal Lands	1
When to Apply	1
Fees for Industrial Facilities	2
Submitted Information Available to Public	2
Completing Required Application Information	2
New or Existing Dischargers of Process Wastewater	2
I. Outfall Locations	3
II. Discharge Date	3
III. Flows, Sources of Pollution, and Treatment Technologies	3
IV. Production	6
V. Effluent Characteristics	6
VI. Engineering Report on Wastewater Treatment	. 22
VII. Requests and Other Information (Optional)	. 22
List of Figures Figure 1. Line drawing example. List of Tables	4
Table 1. Treatment process codes. Table 2. Pollutant groups.	
Table 3. Toxic pollutants and hazardous substances required to be reported if expected to be	. 10
present	. 16
Table 4. Hazardous substances.	. 18

Abbreviations and Acronyms

§ section (usually a section of federal or state rules or statutes)

CFR Code of Federal Regulations

CWA Clean Water Act

DEQ Idaho Department of Environmental Quality

E. coli Escherichia coli

ELG effluent limit guideline

EPA United States Environmental Protection Agency

GC/MS gas chromatography/mass spectrometry

gpd gallons per day

IDAPA Idaho Administrative Procedures Act; refers to citations of Idaho administrative

rules

IPDES Idaho Pollutant Discharge Elimination System

mgd million gallons per day

NPDES National Pollutant Discharge Elimination System

NSPS new source performance standard

POTW publicly owned treatment works

TCDD 2,3,7,8-Tetrachlorodibenzo-P-Dioxin

General Information

Who Must Apply

New industrial (non-POTW) dischargers of process wastewater must complete this application for an Idaho Pollutant Discharge Elimination System (IPDES) individual permit. For the IPDES program and requirements of this application, the term industrial includes discharges from new manufacturing, commercial, mining (not including small suction dredge), silvicultural activities (e.g., wood or mill yard facilities), or drinking water treatment operations (public and private).

Tribal Lands

The Idaho Department of Environmental Quality (DEQ) does not issue IPDES discharge permits for industrial facilities located in/within the limits of Indian Country, defined as:

Indian Country (IDAPA 58.01.25.010.43).

- a. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
- b. All dependent Indian communities within the borders of the United States, whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of the state; and
- c. All Indian allotments, the Indian titles to which have not been extinguished including rights-of-way running through the same.

If the industrial facility is located in Indian Country, contact the United States Environmental Protection Agency (EPA) about submitting a National Pollutant Discharge Elimination System (NPDES) permit application.

When to Apply

Submit an application at least 210 days (180 days by rule + 30 days for DEQ review = 210 days) before the anticipated discharge date to provide DEQ adequate time for completeness determination. Complete applications must be submitted at least 180 days before the date on which the discharge is to commence; however, DEQ is allowed 30 days to determine if the application is complete. New dischargers must not discharge before receiving an issued permit.

DEQ will consider your application complete when the application and any supplementary material are received and completed according to DEQ's satisfaction.

Fees for Industrial Facilities

Industrial facilities are charged an annual fee based on their IPDES Permit Rating Worksheet score¹:

- \$4,000 for minor facilities (score less than 80)
- \$13,000 for major facilities (score equal to or greater than 80)

DEQ assesses annual fees on or before July 1 of each year, and payments are due on or before October 1 of each year.

DEQ reviews and updates each industrial facility's permit rating status during the permit development process and defines an industrial major facility in IDAPA 58.01.25.010.51.b as:

A non-municipal facility that equals or exceeds the eighty (80) point accumulation as described in the Score Summary of the NPDES Non-Municipal Permit Rating Work Sheet (June 27, 1990) or the Department equivalent guidance document.

Industrial permits are not subject to an application fee.

Submitted Information Available to Public

IPDES permit application information is available for public review, upon request. Information **required** by Idaho rules and supporting an individual permit application cannot be held confidential. If you believe some information is a trade secret or should be held confidential, DEQ requires that each page of a document or item describing the confidential information contain language such as *trade secret*, *proprietary*, or *confidential*.

Completing Required Application Information

This IPDES individual industrial permit application for new dischargers of process wastewater is divided into Parts I–VII, including effluent monitoring tables.

If you do not enter information in a required field, an error is highlighted on the application screen. If you do not have the information, enter *9999* into the required field or select *Not Available/Applicable* from the dropdown option, which continues the application process and indicates to permitting staff that you do not have the required information or that the question does not apply. If this option is not available, contact the IPDES program for assistance.

New or Existing Dischargers of Process Wastewater

Are you a new source or discharger (e.g., facility is not currently covered under an existing NPDES/IPDES permit)? If *Yes*, you will be automatically directed to complete the application

¹ Idaho Department of Environmental Quality. 2017. *User's Guide to Permitting and Compliance Volume 1–General Information, Appendix B.* Boise, ID: DEQ. www.deq.idaho.gov/media/60178999/ipdes-user-guide-ipdes-permitting-compliance-0816.pdf

for new dischargers. If *No*, you will be automatically directed to complete the application for existing dischargers. Required field.

New Industrial Facility Permit

Select the type of industrial facilityoperation: Select the type of operation to be permitted from the list provided. If the operation type is not on the list, select *Other* and describe the operation in the box. Required field.

I. Outfall Locations

Identify the outfall number, latitude, longitude, and the receiving water in the table below. Click the location link to identify the outfall location on the map, which will auto-populate the latitude and longitude in decimal degrees. Follow this link to DEQ's Interactive Map for help identifying the receiving water: https://mapcase.deq.idaho.gov/wq2012/. Applicants identify the outfall number and specific location using the interactive map or by entering the known coordinates in decimal degrees to four or more decimal places. If the facility discharges through more than one outfall, use the Add Additional Outfall link to provide this information for each outfall. You must also identify the name of the receiving water to which the activity discharges. For example, if the discharge is into a canal that flows into an unnamed tributary, which in turn flows into a named river, provide the name or description (if no name is available) of the canal, tributary, and the river. For assistance identifying the receiving waters, use DEQ's online interactive map or contact IPDES staff. Required fields.

II. Discharge Date

The date you expect to begin discharging: Estimate the date on which the facility or new outfall will begin to discharge. Required field.

III. Flows, Sources of Pollution, and Treatment Technologies

A. Upload a line drawing showing the water flow through the facility. Indicate sources of intake water, operations, contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in section Part III.B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures. An example of an acceptable line drawing appears in Figure 1. The line drawing should show the route generally taken by water in the proposed facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and storm water runoff. Group similar operations into a single unit and label to correspond to the more detailed listing in Part III.B. The water balance should show your best estimates of anticipated average flows. Include any internal monitoring points, if applicable, to show which internal waste streams are individually monitored. Show all significant losses of water to production, atmosphere,

and discharge. Use actual measurements whenever available or a best estimate. Required field.

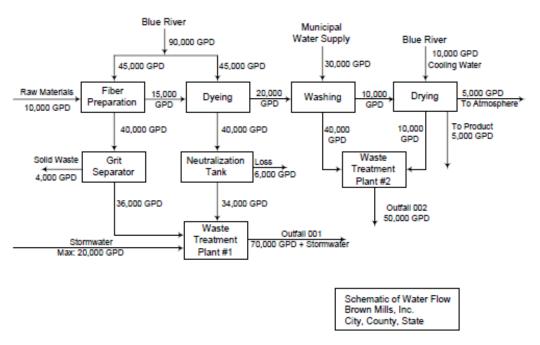


Figure 1. Line drawing example.

B. For each outfall, provide a description of (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff (Operation and Average Flow); (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater (Description and List Codes from Table 1). List all sources of wastewater to each outfall. For operations with more than one outfall, complete the information for each outfall under the Select an outfall to edit dropdown. Describe operations in general terms (e.g., dye-making reactor or distillation tower). Estimate the flow contributed by each source if no data are available. Include planned treatment upgrades or production changes during the permit cycle, and identify the operation and anticipated contributing flow or process estimates. For storm water discharges, estimate the average flow but indicate the rainfall event upon which the estimate is based and the method of estimation. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Use the Add Additional Treatment link to add another treatment type for operations related to each outfall. List the treatment units in process order. Treatment unit processes and codes are provided in Table 1. Required fields.

Table 1. Treatment process codes.

Physical Treatment Processes				
1-A	Ammonia Stripping	1-M	Grit Removal	
1-B	Dialysis	1-N	Microstaining	
1-C	Diatomaceous Earth Filtration	1-0	Mixing	
1-D	Distillation	1-P	Moving Bed Filters	
1-E	Electrodialysis	1-Q	Multimedia Filtration	
1-F	Evaporation	1-R	Rapid Sand Filtration	
1-G	Flocculation	1-S	Reverse Osmosis (<i>Hyperfiltration</i>)	
1-H	Flotation	1-T	Screening	
1-I	Foam Fractionation	1-U	Sedimentation (Settling)	
1-J	Freezing	1-V	Slow Sand Filtration	
1-K	Gas-Phase Separation	1-W	Solvent Extraction	
1-L	Grinding (Comminutors)	1-X	Sorption	
	Chemical 1	Freatment Pro	ocesses	
2-A	Carbon Adsorption	2-G	Disinfection (Ozone)	
2-B	Chemical Oxidation	2-H	Disinfection (Other)	
2-C	Chemical Precipitation	2-I	Electrochemical Treatment	
2-D	Coagulation	2-J	Ion Exchange	
2-E	Dechlorination	2-K	Neutralization	
2-F	Disinfection (Chlorine)	2-L	Reduction	
	Biological	Treatment Pr	ocesses	
3-A	Activated Sludge	3-E	Pre-Aeration	
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application	
3-C	Anaerobic Treatment	3-G	Stabilization Ponds	
3-D	Nitrification—Denitrification	3-H	Trickling Filtration	
	Oth	er Processes	S	
4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent	
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection	
	Sludge Treatmer	nt And Dispos	sal Processes	
5-A	Aerobic Digestion	5-M	Heat Drying	
5-B	Anaerobic Digestion	5-N	Heat Treatment	
5-C	Belt Filtration	5-O	Incineration	
5-D	Centrifugation	5-P	Land Application	
5-E	Chemical Conditioning	5-Q	Landfill	
5-F	Chlorine Treatment	5-R	Pressure Filtration	
5-G	Composting	5-S	Pyrolysis	
5-H	Drying Beds	5-T	Sludge Lagoons	
5-I	Elutriation	5-U	Vacuum Filtration	
5-J	Flotation Thickening	5-V	Vibration	
5-K	Freezing	5-W	Wet Oxidation	
5-L	Gravity Thickening			

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in the table above intermittent or seasonal? If *Yes*, fill in every column for each source of intermittent or seasonal discharge. Base the answers on your best estimate. A discharge is intermittent if it occurs with interruptions during the operating hours of the facility. Discharges caused by routine maintenance shutdowns, process changes, or other similar activities are not considered to be intermittent. A discharge is seasonal if it occurs only during certain parts of the year. The reported flow rate is the highest daily value and should be measured in million gallons per day (mgd). Maximum total volume means the total volume of any one discharge within 24 hours and is measured in units such as gallons. Required field.

IV. Production

Is there an applicable production-based effluent guideline Does a production-based effluent limit guideline (ELG) or New Source Performance Standards (NSPS) apply to the facility? Required field.

Provide the estimated level of production (i.e., projection of actual production level, not design), expressed in the terms and units used in the applicable effluent guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, also submit alternative estimates. *Production* refers to those goods that the proposed facility will produce, not to wastewater production. Base the estimated production figures on a realistic projection of actual daily production level (not design capacity) for each of the first 3 operating years of the facility. This estimate must be a long-term average estimate (e.g., average production on an annual basis). If production will vary depending on long-term shifts in operating schedule or capacity, report alternative production estimates and the basis for the alternative estimates.

If known, report quantities in the units of measurement used in the applicable NSPS or ELG. For example, if the applicable NSPS is expressed as "grams of pollutant discharged per kilogram of unit production," then report maximum *Quantity Per Day* in kilograms. If you do not know whether any NSPS or effluent guideline applies to the facility, report quantities in a unit of measurement known to you. If an effluent guideline or NSPS specifies a method for estimating production, that method must be followed.

Do not conduct new studies to obtain these figures; only data already available are required. It is not required to indicate how the reported information was calculated. Required field if *Yes* to question IV.

V. Effluent Characteristics

General Instructions

The items in Part V require you to collect and report data on the pollutants discharged from each outfall. Each section of this part addresses a different set of pollutants and must be completed in accordance with the specific instructions for that pollutant group. The following general instructions on reporting, sampling, analysis, and reporting of intake data apply to the entire Part V.

Reporting—All levels must be reported as concentration and total mass.

All reporting values for metals must be in terms of total recoverable metal, unless the following applies:

- An applicable, promulgated ELG, NSPS, or standard that specifies the limit for the metal in dissolved, valent, or total form; or
- All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- DEQ has determined that in establishing case-by-case limits, it is necessary to express the metal limits in dissolved, valent, or total form to carry out the provisions of the Clean Water Act (CWA).

If you measure only one daily value, complete only the *Maximum Daily Value* columns and insert one (1) into the *Number of Analyses* columns. DEQ may require you to conduct additional analyses to further characterize the discharges. For composite samples, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24-hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least four grab samples taken over the operating hours of the facility during a 24-hour period.

If you measure more than one daily value for a pollutant and those values represent the waste stream, report them. Describe the method of testing and data analysis. Determine the average of all values within the last year and report the concentration and mass under the *Long-Term Average Value* columns and the total number of daily values under the *Number of Analyses*. Determine the average of all daily values taken during each calendar month, and report the highest average under the *Maximum 30-Day Value* columns.

Sampling—Sample collection for the reported analyses should be supervised by a person experienced in performing industrial wastewater sampling. Contact DEQ for detailed guidance on sampling techniques or specific requirements. Follow the specific requirements contained in the applicable analytical methods for sample containers, sample preservation, holding times, and duplicate sample collection. The sample time should represent the facility's normal operation, to the extent feasible, with all processes that contribute wastewater in normal operation and with the treatment system operating properly with no system upsets. Collect samples from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for collecting a representative sample.

Use grab samples for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and *Escherichia coli* (*E. coli*) or fecal coliform. For all other pollutants, follow the composite sample definitions below. However, take a minimum of one grab sample for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours. For storm water discharges, take a minimum of one to four grab samples, depending on the discharge's duration. Take one grab sample in the first hour (or less) of discharge, with one additional grab sample (up to a minimum of four) taken in each succeeding hour of discharge for discharges lasting 4 or more hours. DEQ may waive composite sampling for any outfall for which you demonstrate that using an automatic sampler is infeasible and a minimum of four grab samples represents the discharge.

Grab and composite samples are defined as:

- Grab sample—An individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
- Composite sample—A combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the previous aliquot was collected. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis, combine aliquots in the laboratory immediately before analysis. Collect four (rather than eight) aliquots or grab samples during actual hours of discharge over a 24-hour period. The samples do not need to be flow proportioned. Only one volatile organic analysis is required.

Data from samples taken in the past may be used, provided:

- All data requirements are met
- Sampling was done no more than three years before submission
- All data represent the present discharge

Factors that would cause the data to be unrepresentative include:

- Significant changes in production level
- Changes in raw materials, processes, or final products
- Changes in wastewater treatment

For two or more substantially identical outfalls, request permission from DEQ to sample, analyze, and submit the results for only one outfall to represent the substantially identical outfalls. If DEQ grants your request, identify which outfall was tested, and describe why the outfall not tested is substantially identical to the outfall that was tested. Include this information in Part VII.

Analysis—Use test methods promulgated in 40 CFR 136; however, if none have been promulgated for a particular pollutant, use any suitable method for measuring the level of the pollutant in the discharge provided that you submit a description of the method or a reference to a published method. In the description, include the sample holding time, preservation techniques, and the quality control measures used.

When EPA promulgates new analytical methods in 40 CFR 136, EPA will provide information describing when to use the new methods to generate data on your discharges. DEQ may request additional information, including current quantitative data, if necessary, to assess the discharges.

Reporting Intake Data— Reporting data under the *Intake* columns is not required unless demonstrating eligibility for a net effluent limit for one or more pollutants (i.e., an effluent limit adjusted by subtracting the average level of the pollutants present in the intake water). To demonstrate eligibility, under the *Intake* columns, report the average of the results of analyses on the intake water (if the water is treated before use, test the water after it is treated), and discuss the requirements for a net limit with DEQ. For additional information, see IDAPA

58.01.25.303.07. If requesting an intake credit, include the request and any relevant data, document, or report, in Part VII.

Are you a small business with gross annual sales for the most recent three years averaging less than \$287,300 per year in 2014 dollars (see IDAPA 58.01.25.105.07.n)?

Small businesses are exempt from the reporting requirement for Section 3 GC/MS Fraction pollutants in Table 2. A small business may quality if it fits one of the following definitions (IDAPA 58.01.25.105.07.n):

- The applicant is a coal mine with an expected total annual production of less than 100,000 tons per year; or
- The applicant has gross total annual sales averaging less than \$287,300 per year in 2014 dollars.

If the small business exemption applies, submit projected sales or production figures for the next three years. The sales or production figures submitted must be for the facility that is the source of the discharge. The data should not be limited only to production or sales for the process or processes that contribute to the discharge, unless those are the only processes at the facility. For sales data, where intracorporate transfers of goods and services are involved, the transfer price per unit should approximate market prices for those goods and services as closely as possible. If necessary, index the sales figures by using the gross national product price deflator, available in the *National Income and Product Accounts of the United States* (Department of Commerce, Bureau of Economic Analysis).

If *Yes*, the small business exemption applies to the GC/MS fractions in Group C only. Even if eligible for a small business exemption, you are still required to provide information on metals, cyanide, total phenols, and dioxin, as well as all of Group A and B pollutants. See Table 2 for specific parameters or pollutants required in each group.

If *No*, complete the *Primary Industry Table*.

Identify your primary industry. The required pollutant categories in the table will autopopulate with an X. Provide testing data for those categories of pollutants identified with an X. The GC/MS fraction categories will appear in the dropdown list that you must submit data for.

Table 2. Pollutant groups.

Table 2. Pollutant groups.	
Gro	up A Pollutants
Biological Oxygen Demand (BOD)	Ammonia (as N)
Chemical Oxygen Demand (COD)	Temperature (Winter)
Total Organic Carbon (TOC)	Temperature (Summer)
Total Suspended Solids (TSS)	рН
Flow	
Gro	up B Pollutants
Bromide	Sulfate (SO4)
Total Residual Chlorine (TRC)	Sulfide (as S)
Color	Sulfite (as SO3)
Escherichia coli (E. coli)	Surfactants
Fluoride	Aluminum, total
Nitrate-Nitrite (as N)	Barium, total
Nitrogen, total organic*	Boron, total
Oil and grease	Cobalt, total
Phosphorus (as P), total	Iron, total
Radioactivity	Magnesium, total
Alpha, total	Molybdenum, total
Beta, total	Manganese, total
Radium, total	Tin, total
Radium 226, total	Titanium, total
Gro	up C Pollutants
Metals, Cyanide, Phenols, and Dioxin	
Antimony, total	Nickel, total
Arsenic, total	Selenium, total
Beryllium, total	Silver, total
Cadmium, total	Thallium, total
Chromium, total	Zinc, total
Copper ¹ , total	Cyanide, total
Lead, total	Phenols, total
Mercury, total	2,3,7,8-Tetrachlorodibenzo-P-Dioxin
GC/MS Volatile Compounds	
1,1,1-Trichloroethane	Chlorobenzene
1,1,2,2-Tetrachloroethane	Chlorodibromomethane
1,1,2-Trichloroethane	Chloroethane
1,1-Dichloroethane	Chloroform
1,1-Dichloro-ethylene*	Dichlorobromomethane
1,2-Dichloroethane	Dichloro-difluoromethane*
1,2-Dichloropropane	Ethylbenzene
1,2-Trans-dichloroethylene	Methyl bromide
1,3-Dichloropropylene	Methyl chloride
2-Chloroethylvinyl ether	Methylene chloride*
Acrolein	Tetrachloroethylene

Acrylonitrile Toluene Benzene Trichloroethylene Bis-chloro-methyl-ether* Trichlorofluoromethane* **Bromoform** Vinyl chloride Carbon tetrachloride GC/MS Acid Compounds 4,6-Dinitro-o-cresol 2,4,6-Trichlorophenol 2,4-Dichlorphenol 4-Nitrophenol 2,4-Dimethylphenol P-chloro-m-cresol 2,4-Dinitro-phenol Pentachlorophenol 2-Chlorophenol Phenol 2-Nitrophenol GC/MS Base-Neutral Compounds 1,2,4-Trichlorobenzene Bis (2-ethylhexyl) phthalate 1,2-Dichlorobenzene Butyl benzyl phthalate 1,2-Diphenylhydrazine Chrysene 1,3-Dichlorobenzene Dibenzo (a,h) anthracene 1,4-Dichlorobenzene Diethyl phthalate Dimethl phthalate 2,4-Dinitrotoluene 2.6-Dinitrotoluene Di-N-butyl phthalate 2-Chloronaphthalene Di-N-octyl phthalate 3,3-Dichlorobenzidine Fluoranthene 3,4-Benzofluoranthene Fluorene 4-Bromophenyl phenyl ether Hexachlorobenzene 4-Chlorophenyl phenyl ether Hexachlorobutadiene Acenapthene Hexachlorocyclopentadiene Acenapthylene Hexachloroethane Anthracene Indeno (1,2,3-cd) pyrene Benzidine Isophorone Benzo (a) anthracene Napthalene Benzo (a) pyrene Nitrobenzene N-nitro-sodimethylamine Benzo (ghi) perylene N-nitrosodi-N-propylamine Benzo (k) fluoranthene Bis (2-chloroethoxy) methane N-nitro-sodiphenylamine Phenanthrene Bis (2-chloroethyl) ether Bis (2-Chloroisopropyl) Ether Pyrene GC/MS Pesticides 4,4'-DDD Endrin aldehyde 4,4'-DDE Gamma-BHC 4.4'-DDT Heptachlor Aldrin Heptachlor epoxide Alpha-BHC PCB-1016 Alpha-endosulfan PCB-1221 Beta-BHC PCB-1232

Beta-endosulfan	PCB-1242
Chlordane	PCB-1248
Delta-BHC	PCB-1254
Dieldrin	PCB-1260
Endosulfan sulfate	Toxaphene
Endrin	

^{*} These pollutants are only available on the existing process wastewater discharge application.

Groups A. and B. Report the concentration and mass of the pollutants to be discharged from each outfall (for new sources or discharges this is the expected concentration and mass).

Complete Each part group should be completed according to the specific instructions. See Table 2 for parameters required in each group of this section according to the specific instructions. For each outfall, estimate and report data on the pollutants expected to be discharged. Sampling and analyses are not required at this time; but if available, report the data.

Group A. Pollutants and Parameters

Provide estimated daily maximum values and average daily values for the following pollutants and parameters for each outfall, unless waived by DEQ. Report estimates of data on pollutants or parameters in Group A for each outfall, including outfalls containing only noncontact cooling water or nonprocess wastewater.

To request a waiver from reporting any of these pollutants or parameters, submit a written request to DEQ specifying which pollutants or parameters should be waived and the reasons for requesting such a waiver. Submit the request to DEQ before or with the permit application. DEQ may waive the requirements for information about these pollutants or parameters if they determine that less stringent reporting requirements are adequate to support issuing the permit. Usually extensive documentation is not needed, but contacting DEQ to receive instructions on what a particular request should contain. Include any waiver request information in Part VII.

Group B. Pollutants

For all outfalls, data for pollutants in Group B should be reported only for pollutants that you believe will be present or are limited directly by an effluent limit guideline or NSPS or indirectly through limits on an indicator pollutant. Complete Group B for each outfall, including outfalls containing only non-contact cooling water or storm water runoff. Report quantitative data if the pollutants in question are limited in an ELG either directly, or indirectly but expressly, through limits on an indicator (e.g., using total suspended solids as an indicator to control the discharge of iron and aluminum). For other discharged pollutants, provide quantitative data or explain their presence in the discharge. Mark either the *Believed Present* or *Believed Absent* column based on the best estimate, and test for those believed to be present. Base the determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products and byproducts, and any previous analyses know to you of your effluent or similar effluent. Pollutants that are believed absent require no testing. Reporting data under the *Intake* columns is not required unless demonstrating eligibility for a net effluent limit for one or more pollutants (i.e., an effluent limit adjusted by

¹ If an applicant identifies Copper in the effluent stream, DEQ may request additional hardness or Biotic Ligand Model parameters necessary to calculate WQBELs.

subtracting the average level of the pollutants present in the intake water). You may select the radio button at the top of either the *Believed Present* or *Believed Absent* column to select all pollutants, or individually change the selection if a pollutant differs from the majority.

DEQ may consider a request waiving the requirement to test for pollutants for an industrial category or subcategory. Support your request with data representing the industrial category or subcategory in question. The data must demonstrate that individual testing is unnecessary because the facilities in question discharge substantially identical levels of the pollutant, or discharge the pollutant uniformly at sufficiently low levels. Include this information in Part IX.

Collect composite samples for all pollutants analyzed in this group except collect grab samples for total residual chlorine, oil and grease, and *E.coli* or fecal coliform. The *Long-Term Average Value* and *Maximum 30-Day Values* columns are not required but should be filled out if data are available. Required fields.

Report estimates of data on pollutants or parameters in Group B for each outfall, including outfalls containing only noncontact cooling water or nonprocess wastewater. Report estimates for those pollutants that you know or have reason to believe:

- Will be discharged or
- Are limited directly by an effluent limit guideline (or NSPS) or indirectly through promulgated limits on an indicator pollutant

Group C Pollutants

Metals, Cyanide, and Total Phenols 2,3,7,8-Tetrachlorodibenzo-P-Dioxin GC/MS Fraction – Volatile Organic Compounds GC/MS Fraction – Acid-Extractable Compounds GC/MS Fraction – Base-Neutral Compounds GC/MS Fraction – Pesticides

Select *Testing Required* for all such pollutants that apply to your industry and for dioxin, toxic metals, cyanides, and total phenols. Select *Believed Present* for pollutants you know or have reason to believe are present if you fall under secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions. If you select *Believed Present* for a pollutant, provide the results of at least 1 analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 parts per billion (ppb) or greater. If you select acrolein, acrylonitrile, 2,3 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, as *Believed Present*, provide the results of at least 1 analysis for each pollutant you know or have reason to believe discharges in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you select *Believed Present*, submit at least 1 analysis or briefly describe the reasons the pollutant is expected to be discharged. For each outfall, if any of the facility's processes that contribute wastewater fall into one of the categories, select *Testing Required* and test for the following:

- All of the toxic metals, cyanide, total phenols, 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)
 - EPA currently requires effluent measurement to be total recoverable (TR) metals data.

- Conversion factors and translators are used to convert to dissolved criteria when necessary
- Organic toxic pollutants contained in Table 2 as applicable to your category, unless you qualify as a small business.

The organic toxic pollutants are listed by GC/MS fractions. For example, the Organic Chemicals Industry requires testing in all four fractions; therefore, applicants in this category must test for all organic toxic pollutants in Group C. Including total phenols in Group C is not intended to classify total phenols as a toxic pollutant. When determining which industry category the facility is in for testing requirements, you are not determining the category for any other purpose, and you are not giving up the right to challenge inclusion in that category before your permit is issued (e.g., deciding whether an ELG is applicable). For all other cases (i.e., secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), select either the *Believed Present* or *Believed Absent* for each pollutant.

- For every pollutant you know or have reason to believe is present in the discharge in concentrations of 10 ppb or greater, report quantitative data.
- For acrolein, acrylonitrile, 2, 4 dinitrophenol, and 2-methyl-4, 6 dinitrophenol, where you expect these pollutants to be discharged in concentrations of 100 ppb or greater, report quantitative data.
- For every pollutant expected to be discharged in concentrations less than the thresholds specified above, either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. Include this information in Part IX.

DEQ may consider a request waiving the requirement to test for pollutants for an industrial category or subcategory. Provide information to support your request in Part IX with data representing the industrial category or subcategory in question. The data must demonstrate that individual testing is unnecessary because the facilities in question discharge substantially identical levels of the pollutant, or discharge the pollutant uniformly at sufficiently low levels.

If qualifying as a small business, you are exempt from the reporting requirements for the organic toxic pollutants, listed in Group C as GC/MS fractions. For pollutants in intake water, see the Report Intake Data general instructions in Part V. The *Long-Term Average Value* and *Maximum 30-Day Value* columns are not required but should be filled out if data are available. Select *Testing Required* for dioxin if you use or manufacture one of the following compounds:

- 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T)
- 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP)
- 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate, (Erbon)
- 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate, (Ronnel)
- 2,4,5,-trichlorophenol, (TCP)
- hexachlorophene, (HCP)

If you select *Testing Required* or *Believed Present*, perform a screening analysis for dioxins, using gas chromatography with an electron capture detector. A quantification standard for TCDD is not required. Describe the results of this analysis in Part IX (e.g., no measurable baseline deflection at the retention time of TCDD or a measurable peak within the tolerances of the

retention time of TCDD). DEQ may require a quantitative analysis if you report a positive result. Required fields.

Group **CD**. Toxic Pollutants and Hazardous Substances

1. Do you know or have reason to believe pollutants from Table 32D are discharged or may be discharged from any outfall? Required field.

List any of the pollutants from Table 32D that you know or have reason to believe will be discharged from any outfall. For every pollutant listed, briefly describe the reasons you believe it will be present. List any pollutants from Table 3 that you believe will be present in any outfalls and briefly explain why you believe they will be present. Do not estimate the pollutant's quantity unless you already have quantitative data. Sampling and analyses are not required at this time, but if available, report the data. Required fields if *Yes* for C.1.

Table 3. Toxic pollutants and hazardous substances required to be reported if expected to be present.

	Toxic Pollutant					
Asbestos						
Hazardous Substances						
Acetaldehyde	Dimethyl amine	Naled				
Allyl alcohol	Dintrobenzene	Napthenic acid				
Allyl chloride	Diquat	Nitrotoluene				
Amyl acetate	Disulfoton	Parathion				
Aniline	Diuron	Phenolsulfonate				
Benzonitrile	Epichlorohydrin	Phosgene				
Benzyl chloride	Ethion	Propargite				
Butyl acetate	Ethylene diamine	Propylene oxide				
Butylamine	Ethylene dibromide*	Pyrethrins				
Captan	Formaldehyde	Quinoline				
Carbaryl	Furfural	Resorcinol				
Carbofuran	Guthion	Strontium				
Carbon disulfide	Isoprene	Strychnine				
Chlorpyrifos	Isopropanolamine	Styrene*				
Coumaphos	Kelthane	2,4,5-T (2,4,5- Trichlorophenoxyacetic acid)				
Cresol	Kepone	TDE (Tetrachlorodiphenyl ethane)				
Crotonaldehyde	Malathion	2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]				
Cyclohexane	Mercaptodimethur	Trichlorofon				
2,4-D (2,4-Dichlorophenoxyacetic acid)	Methoxychlor	Triethanolamine				
Diazinon	Methyl mercaptan	Triethylamine				
Dicamba	Methyl methacrylate	Trimethylamine*				
Dichlobenil	Methyl parathion	Uranium				
Dichlone	Mevinphos	Vanadium				
2,2-Dichloropropionic acid	Mexacarbate	Vinyl acetate				
Dichlorvos	Monoethyl amine	Xylene				
Diethyl amine	Monomethyl amine	Xylenol				
		Zirconium				

^{*} These pollutants are only available on the existing process wastewater discharge application.

2. Exemption Request for Hazardous Substances

Are you requesting an exemption under 40 CFR 117.12(a)(2) for pollutants you discharge that are listed in Table 4? Required field.

The discharge of pollutants in Table 42D may be subject to additional requirements of the Clean Water Act (CWA) §311 (Oil and Hazardous Substances Liability). These requirements are not administered through the IPDES Program. To request an exemption from these requirements under 40 CFR 117.12(a)(2), complete the following information for each pollutant. Using Table

4 Table 2D-4 in the instructions, determine if you need to complete the table below: Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances in Table 4 may be exempted from the requirements of the CWA §311, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted if the origin, source, and amount of the discharged substances are identified in the IPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place.

To request an exemption from these requirements under 40 CFR 117.12(a)(2), provide the following information:

- Substance and amount of each substance that may be discharged
- Origin and source of the discharge of the substance
- Treatment that is to be provided for the discharge by
 - An onsite treatment system separate from any treatment system that will treat normal discharge
 - A treatment system designed to treat normal discharge and that is additionally capable of treating the amount of the substance identified
 - Any combination of the above

An exemption from the CWA §311 reporting requirements does not exempt you from reporting requirements for pollutants listed in Table 3. Include any waiver request information in Part VII. Required fields if *Yes* for C.2.

Table 4. Hazardous substances.

Table 4. Hazardous substances.		
1. Acetaldehyde	60. n-Butylphthalate	116. Dichlorvos
2. Acetic acid	61. Butylamine	117. Dieldrin
3. Acetic anhydride	62. Butyric acid	118. Diethylamine
Acetone cyanohydrin	63. Cadmium acetate	119. Dimethylamine
Acetyl bromide	64. Cadmium bromide	120. Dinitrobenzene
6. Acetyl chloride	65. Cadmium chloride	121. Dinitrophenol
7. Acrolein	66. Calcium arsenate	122. Dinitrotoluene
8. Acrylonitrile	67. Calcium arsenite	123. Diquat
9. Adipic acid	68. Calcium carbide	124. Disulfoton
10. Aldrin	69. Calcium chromate	125. Diuron
11. Allyl alcohol	70. Calcium cyanide	126. Dodecylbenzesulfonic acid
12. Allyl chloride	71. Calcium dodecylbenzenesulfonate	
13. Aluminum sulfate	72. Calcium hypochlorite	128. Endrin
14. Ammonia	73. Captan	129. Epichlorohydrin
15. Ammonium acetate	74. Carbaryl	130. Ethion
16. Ammonium benzoate	75. Carbofuran	131. Ethylbenzene
17. Ammonium bicarbonate	76. Carbon disulfide	132. Ethylenediamine
18. Ammonium bichromate19. Ammonium bifluoride	77. Carbon tetrachloride 78. Chlordane	133. Ethylene dibromide
20. Ammonium bisulfite	79. Chlorine	134. Ethylene dichloride
21. Ammonium carbamate	80. Chlorobenzene	135. Ethylene diaminetetracetic acid
22. Ammonium carbonate	81. Chloroform	(EDTA) 136. Ferric ammonium citrate
23. Ammonium chloride	82. Chloropyrifos	137. Ferric ammonium oxalate
24. Ammonium chromate	83. Chlorosulfonic acid	138. Ferric chloride
25. Ammonium citrate	84. Chromic acetate	139. Ferric fluoride
26. Ammonium fluoroborate	85. Chromic acid	140. Ferric nitrate
27. Ammonium fluoride	86. Chromic sulfate	141. Ferric sulfate
28. Ammonium hydroxide	87. Chromous chloride	142. Ferrous ammonium sulfate
29. Ammonium oxalate	88. Cobaltous bromide	143. Ferrous chloride
30. Ammonium silicofluoride	89. Cobaltous formate	144. Ferrous sulfate
31. Ammonium sulfamate	90. Cobaltous sulfamate	145. Formaldehyde
32. Ammonium sulfide	91. Coumaphos	146. Formic acid
33. Ammonium sulfite	92. Cresol	147. Fumaric acid
34. Ammonium tartrate	93. Crotonaldehyde	148. Furfural
35. Ammonium thiocyanate	94. Cupric acetate	149. Guthion
36. Ammonium thiosulfate	95. Cupric acetoarsenite	150. Heptachlor
37. Amyl acetate	96. Cupric chloride	151. Hexachlorocyclopentadiene
38. Aniline	97. Cupric nitrate	152. Hydrochloric acid
39. Antimony pentachloricle	98. Cupric oxalate	153. Hydrofluoric acid
40. Antimony potassium tartrate	99. Cupric sulfate	154. Hydrogen cyanide
41. Antimony tribromide	100. Cupric sulfate ammoniated	155. Hydrogen sulfide
42. Antimony trichloride	101. Cupric tartrate	156. Isoprene
43. Antimony trifluoride	102. Cyanogen chloride	157. Isopropanolamine
44. Antimony trioxide	103. Cyclohexane	dodecylbenzenesulfonate
45. Arsenic disulfide	104. 2,4-D acid (2,4-	158. Kelthane
46. Arsenic pentoxide	Dichlorophenoxyacetic acid)	159. Kepone
47. Arsenic trichloride	105. 2,4-D esters (2,4-	160. Lead acetate
48. Arsenic trioxide	Dichlorophenoxyaceticacid esters)	161. Lead arsenate
49. Arsenic trisulfide	106. DDT	162. Lead chloride
50. Barium cyanide	107. Diazinon	163. Lead fluoborate
51. Benzene	108. Dicamba	164. Lead flourite
52. Benzoic acid	109. Dichlobenil	165. Lead iodide
53. Benzonitrile	110. Dichlone	166. Lead nitrate
54. Benzoyl chloride	111. Dichlorobenzene	167. Lead stearate
55. Benzyl chloride	112. Dichloropropane	168. Lead sulfide
56. Beryllium chloride	113. Dichloropropene	169. Lead sulfide
57. Beryllium fluoride	114. Dichloropropene-	170. Lead thiocyanate 171. Lindane
58. Beryllium nitrate59. Butylacetate	dichloproropane mix 115. 2,2-Dichloropropionic acid	171. Lindane 172. Lithium chromate
oo. Datylaootate		172. Ettiidii Ollolliate

173. Malathion
174. Maleic acid
175. Maleic anhydride
176. Mercaptodimethur
177. Mercuric cyanide
178. Mercuric nitrate
179. Mercuric sulfate
180. Mercuric thiocyanate
181. Mercurous nitrate
182. Methoxychlor
183. Methyl mercaptan
184. Methyl methacrylate
185. Methyl parathion
186. Mevinphos
187. Mexacarbate
188. Monoethylamine
189. Monomethylamine
190. Naled

190. Naled
191. Naphthalene
192. Naphthenic acid
193. Nickel ammonium sulfate
194. Nickel chloride
195. Nickel hydroxide
196. Nickel nitrate
197. Nickel sulfate
198. Nitric acid
199. Nitrobenzene
200. Nitrogen dioxide
201. Nitrophenol
202. Nitrotoluene
203. Paraformaldehyde
204. Parathion
205. Pentachlorophenol

210. Phosphorus oxychloride
211. Phosphorus pentasulfide
212. Phosphorus trichloride
213. Polychlorinated biphenyls (PCB)
214. Potassium arsenate
215. Potassium arsenite
216. Potassium bichromate

217. Potassium chromate218. Potassium cyanide

206. Phenol

207. Phosgene

209. Phosphorus

208. Phosphoric acid

219. Potassium hydroxide
220. Potassium permanganate
221. Propargite
222. Propionic acid
223. Propionic anhydride
224. Propylene oxide
225. Pyrethrins
226. Quinoline
227. Resorcinol
228. Selenium oxide
229. Silver nitrate
230. Sodium
231. Sodium arsenate

231. Sodium arsenate
232. Sodium arsenite
233. Sodium bichromate
234. Sodium bifluoride
235. Sodium bisulfite
236. Sodium chromate
237. Sodium cyanide
238. Sodium
dodecylbenzenesulfonate

dodecylbenzenesulfonate 239. Sodium fluoride 240. Sodium hydrosulfide 241. Sodium hydroxide 242. Sodium hypochlorite 243. Sodium methylate 244. Sodium nitrite

245. Sodium phosphate (dibasic)
246. Sodium phosphate (tribasic)
247. Sodium selenite
248. Strontium chromate
249. Strychnine
250. Styrene
251. Sulfuric acid
252. Sulfur monochloride
253. 2,4,5-T acid (2,4,5Trichlorophenoxyacetic acid)
254. 2,4,5-T amines (2,4,5Trichlorophenoxyacetic acid amines)

256. 2,4,5-T salts (2,4,5-Trichlorophenoxyacetic acid salts) 257. 2,4,5-TP acid (2,4,5-

Trichlorophenoxy acetic acid esters)

255. 2,4,5-T esters (2,4,5

Trichlorophenoxypropanoic acid)

258. 2,4,5-TP acid esters (2,4,5-Trichlorophenoxy propanoic acid esters)

259. TDE (Tetrachlorodiphenyl ethane)

260. Tetraethyl lead

261. Tetraethyl pyrophosphate

262. Thallium sulfate
263. Toluene
264. Toxaphene
265. Trichlorofon
266. Trichloroethylene
267. Trichlorophenol
268. Triethanolamine
dodecylbenzenesulfonate
269. Triethylamine
270. Trimethylamine

271. Uranyl acetate272. Uranyl nitrate273. Vanadium penoxide274. Vanadyl sulfate275. Vinyl acetate276. Vinylidene chloride

277. Xylene 278. Xylenol 279. Zinc acetate

280. Zinc ammonium chloride

281. Zinc borate
282. Zinc bromide
283. Zinc carbonate
284. Zinc chloride
285. Zinc cyanide
286. Zinc fluoride
287. Zinc formate
288. Zinc hydrosulfite
289. Zinc nitrate

290. Zinc phenolsulfonate291. Zinc phosphide292. Zinc silicofluoride293. Zinc sulfate294. Zirconium nitrate

295. Zirconium potassium flouride 296. Zirconium sulfate

297. Zirconium tetrachloride

VI. Engineering Report on Wastewater Treatment

- A. Are there any technical evaluations concerning the wastewater treatment, including engineering reports or pilot plant studies? If *Yes*, upload the available reports in Part VII. Required field.
- B. Are there any existing pilot projects or production facilities resembling your facility? Provide the name and location of any existing facilities that, to the best of your knowledge, resemble this production facility with respect to production processes, wastewater constituents, or wastewater treatments. Report the name and location of any existing facilities that, to the best of your knowledge, resemble your planned operation with respect to items produced, production process, wastewater constituents, or wastewater treatment. Do not conduct studies to respond to this item. Submit only data already available.

This information will be used to inform the permit writer of appropriate treatment methods and their associated permit conditions and limits. Required field.

VII. Requests and Other Information (Optional)

- A. Do you intend to request one or more of the variances authorized under IDAPA or the Code of Federal Regulations? Identify if you intend to request a variance, waiver, or intake credit and which type you intend to request. DEQ will discuss the information and timeline requirements with you. Required field.
 - If *Yes*, select items from the drop down list and provide any variance, waiver, or intake credit request materials in Part VII.D.
- B. Do you intend to request a mixing zone? Answer *Yes*, if you want DEQ to consider a mixing zone in the reasonable potential analysis and effluent determination. The application is defaulted to *Yes*. Select *No*, if you do not intend to request a mixing zone; however, this may impact permit development and effluent limits. Required field.
- C. Use the space below to expand upon any of the previous questions or to alert the reviewer of any other additional information that should be considered in establishing permit limits for the facility operation (e.g., intake credits, mixing zone requests, and waivers).
- D. Upload Additional Information Upload any data, documents, or reports which were not included elsewhere in the application that would support development of permit limits or conditions. Files may be any file type.